World class plants strategically located in India, Thailand & Qatar having installed capacity of over 650,000 tpa with backward integration for Phthalic Anhydride and Chlorine

One stop Total Solutions provider for all the Plasticizer needs

COMPLETE RANGE OF PLASTICIZERS

Phthalate | Adipate | Trimelliate | Citrate | Stearate | Benzoate | Sebacate | Maleate | Polymeric | ESBO | Chlorinated Paraffins

KANACHLOR CHLORINATED PARAFFIN

Grades	Unit	Test Method	40 D/AD/ AI/AD1	40 C	42 WH 1	42 WH	42 WAX	45 D/AD/ AI/AD1	45 C	45 KD 5	45 FS	47 WH 1	50 WH	52 D/AD/ AI/AD1	52 C	52 KD 5
Properties																
Colour (Max.)	Hazen	ASTM D 1045-86	60	60	100	200	300	60	60	100	60	250	300	60	60	100
Specific Gravity at 27°C	N/A	ASTM D 1045	1.110±0.020	1.100±0.020	1.180±0.020	1.180±0.020	1.200±0.020	1.200±0.020	1.200±0.020	1.200±0.020	1.180±0.020	1.210±0.030	1.280±0.020	1.280±0.020	1.300±0.020	1.280±0.020
Refractive Index at 27°C	N/A	ASTM D 1807	1.483± 0.002	1.483±0.002	1.503±0.002	1.503±0.002	1.506±0.002	1.498±0.002	1.496±0.002	1.498±0.002	1.491±0.002	1.503±0.003	1.520±0.003	1.509±0.002	1.510±0.002	1.510±0.002
Volatile Loss at 180°C for 4 Hours (Max.)	% by weight	KLJ/QCD/WIN/26	3.50	9.00	2.50	2.00	0.80	3.00	7.00	6.50	9.00	1.40	0.80	1.50	3.50	4.00
Chlorine Content	% by weight	ISI 1448-77	40±2.0	40±2.0	42±2.0	42±2.0	42±2.0	45±2.0	45±2.0	45±2.0	45±2.0	47±2.0	50±2.0	52±2.0	52±2.0	52±2.0
Free Mineral Acidity (Max.)	% by weight	KLJ/QCD/WIN/24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Free Chlorine (Max.)	% by weight	ISI 9189-79	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Viscosity at 27°C	Poise	Brookfield Viscometer ASTM D 445	0.50-1.0	0.30-1.0	10-25	15-40	50-100	2-5	0.50-1.50	2-5	0.3-0.8	15-25	300-800	12-35	5-12	10-25
Heat Stability at 180°C for 20 Minutes (Max.)	Colour	KLJ/QCD/WIN/28	Yellow	Yellow	Light Brown	Brown	Brown	Yellow	Yellow	Brown	Dark Yellow	Light Brown	Brown	Yellow	Yellow	Brown
Thermal Stability at 175°C for 4 Hours (Max.)	% by weight	KLJ/QCD/WIN/27	0.10	0.10	0.40	0.40	0.20	0.10	0.10	0.20	0.20	0.20	0.40	0.10	0.10	0.20
pH Value (Min.)	-	KLJ/QCD/WIN/29	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

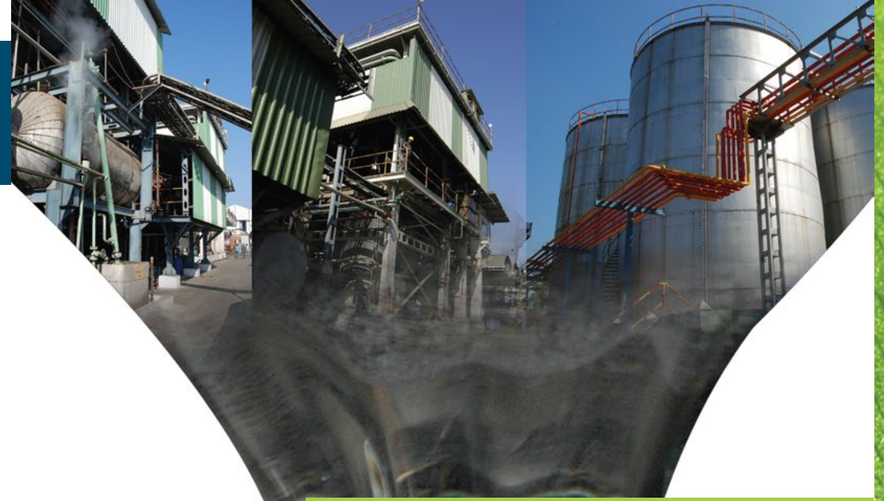
Grades	Unit	Test Method	52 FS	58 WH 1	58 D/AD/ AI/AD1	58 C	58 KD 5	58 FS	62 D/AD/ AI/AD1	62 C	62 KD 5	62 FS	65 D/AD/ AI/AD1	68 FS	68 D/AD/ AI/AD1	68 C
Properties																
Colour (Max.)	Hazen	ASTM D 1045-86	60	250	60	60	100	60	100	60	100	60	150	60	150	100
Specific Gravity at 27°C	N/A	ASTM D 1045	1.300±0.020	1.330±0.030 (at 60°C)	1.360±0.020	1.350±0.020	1.350±0.020	1.350±0.020	1.400±0.030	1.400±0.030	1.400±0.030	1.400±0.030	1.460±0.030	1.510±0.040	1.500±0.040 (at 50°C)	1.540±0.040 (at 50°C)
Refractive Index at 27°C	N/A	ASTM D 1807	1.506±0.002	1.530±0.003	1.518±0.002	1.515±0.002	1.516±0.002	1.513±0.003	1.526±0.003	1.524±0.003	1.525±0.003	1.520±0.003	-	1.531±0.004	N/A	N/A
Volatile Loss at 180°C for 4 Hours (Max.)	% by weight	KLJ/QCD/WIN/26	6.00	0.60	1.20	2.00	3.50	4.00	0.90	1.50	3.00	3.50	0.50	2.00	0.50	1.00
Chlorine Content	% by weight	ISI 1448-77	52±2.0	58±2.0	58±2.0	58±2.0	58±2.0	58±2.0	62±2.0	62±2.0	62±2.0	62±2.0	65±2.0	68±2.0	66±2.0	68±2.0
Free Mineral Acidity (Max.)	% by weight	KLJ/QCD/WIN/24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Free Chlorine (Max.)	% by weight	ISI 9189-79	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Viscosity at 27°C	Poise	Brookfield Viscometer ASTM D 445	1-4	30-50 (at 60°C)	125-400	15-35	60-200	4-8	300-1200	60-150	200-600	15-40	100-500	100-500 (at 50°C)	300-1500 (at 50°C)	80-300 (at 50°C)
Heat Stability at 180°C for 20 Minutes (Max.)	Colour	KLJ/QCD/WIN/28	Dark Yellow	Light Brown	Yellow	Yellow	Brown	Dark Yellow	Dark Yellow	Yellow	Brown	Dark Yellow	Light Brown	Dark Yellow	Brown	Light Brown
Thermal Stability at 175°C for 4 Hours (Max.)	% by weight	KLJ/QCD/WIN/27	0.20	0.20	0.10	0.10	0.20	0.20	0.10	0.10	0.20	0.20	0.10	0.20	0.20	0.20
pH Value (Min.)	-	KLJ/QCD/WIN/29	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

RoHS: All above products are complying to RoHS requirments.

Note: Specific grades of CPW can be made on request.

The above properties are inductive and represent the values as tested in our laboratories. There is no guarantee/warranty whatsoever. Suitability of the product for particular application may be verified before use.

Packing Options : All the above liquid products are available in Plastic Drums (200 & 225 lirs.), Steel Drums, Intermediate Bulk Containers (IBC's/Totes), Flexi Tanks & ISO Tanks.



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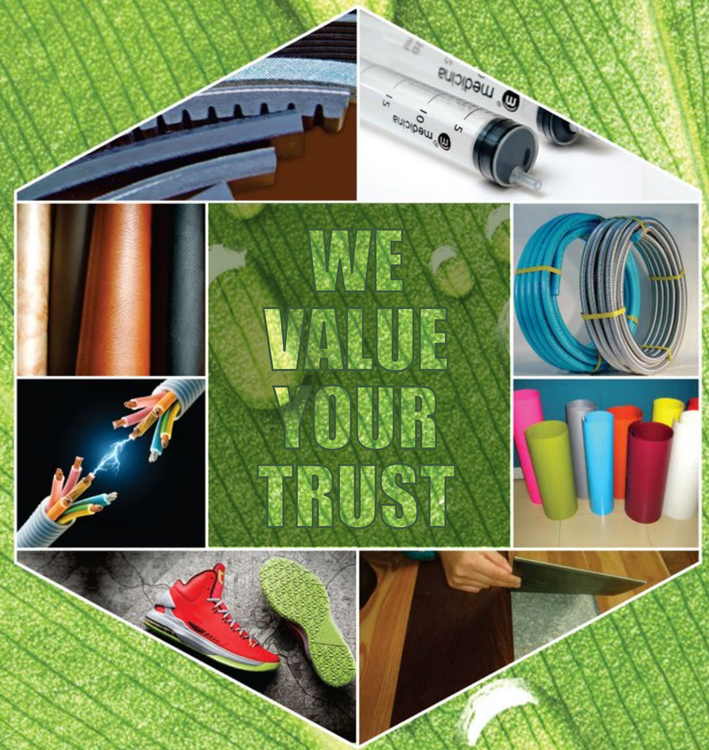

... sustaining life with natural footprints

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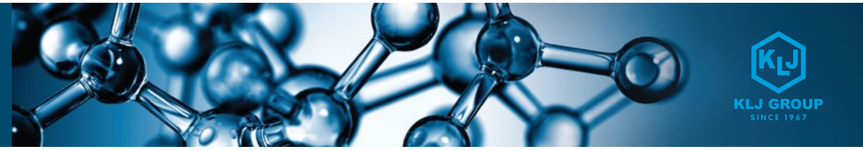
PLASTICIZERS



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PHTHALATES

Trade Name / Properties	Unit	Test Method	KANATOL 1212 Di Do Decyl Phthalate	KANATOL 1210 Di Un Decyl Phthalate	KANATOL 1001 Di Iso Decyl Phthalate	KANATOL 1000L Di Decyl Phthalate (Linear)	KANATOL 1010 Di Propyl Heptyl Phthalate	✦ KANATOL 900 Di Iso Nonyl Phthalate	✦ KANATOL 800 (FG) Di 2 Ethyl Hexyl Phthalate	KANATOL 800 Di 2 Ethyl Hexyl Phthalate	KANATOL 1056
Appearance	NA	Visual	Water white clear liquid								
Colour (Max.)	Hazen	ASTM D 1045-08	40	50	20	20	20	20	15	20	20
Specific Gravity at 27°C	NA	ASTM D 1045-08	0.942±0.003	0.952±0.003	0.963±0.003	0.959±0.003	0.961±0.003	0.973±0.003	0.983±0.003	0.983±0.003	0.983±0.003
Refractive Index at 27°C	NA	ASTM D 1045-08	1.480±0.003	1.482±0.003	1.485±0.003	1.486±0.003	1.485±0.003	1.486±0.003	1.486±0.003	1.486±0.003	1.486±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% by mass	KLJ TM	0.10	0.10	0.10	0.10	0.10	0.10	0.05	0.10	0.15
Moisture Content (Max.)	% by mass	ASTM E 203-08	0.10	0.10	0.10	0.10	0.10	0.10	0.05	0.10	0.10
Acidity as Acid (Max.)	% by mass	ASTM D 1045-08	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03
Ester Value	mg KOH/gm	ASTM D 1045-08	223±3	236±3	251±3	251±3	251±3	267±3	287±3	287±3	287±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	99.5	99.5	99.5	99.5	99.5	99.5	99.9	99.5	99.5
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	99.5	99.5	99.5	99.5	99.5	99.5	99.9	99.5	99.5
Residual Alcohol (Max.)	% by area	KLJ TM	0.20	0.20	0.10	0.10	0.10	0.10	0.03	0.10	0.10
Viscosity at 20°C	cPs	KLJ TM	-	118-124	105-111	44-50	117-123	76-82	79-85	79-85	71-77
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	400	-	-	-	386	386	-
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-	261 at 5 mmHg	251-254 at 7 mmHg	250 at 7 mmHg	231 at 7 mmHg	231 at 7 mmHg	-
REACH Compliance	Y/N	-	YES	YES	YES	YES	YES	YES	NO	NO	NO

Trade Name / Properties	Unit	Test Method	KANATOL 8461 Di Cyclo Hexyl Phthalate	KANATOL 7720	KANATOL 470 Benzyl Butyl Phthalate	KANATOL 400 M Di Butyl Phthalate (M)	KANATOL 400 N Di n Butyl Phthalate	KANATOL 400 I Di Iso Butyl Phthalate	KANATOL 200 Di Ethyl Phthalate	KANATOL 100 Di Methyl Phthalate
Appearance	NA	Visual	Water white clear liquid							
Colour (Max.)	Hazen	ASTM D 1045-08	50 (10% Acetone)	40	40	20	20	20	20	20
Specific Gravity at 27°C	NA	ASTM D 1045-08	-	0.962±0.003	1.118±0.003	1.038±0.003	1.043±0.003	1.038±0.003	1.117±0.003	1.486±0.003
Refractive Index at 27°C	NA	ASTM D 1045-08	-	1.481±0.003	1.534±0.003	1.492±0.003	1.492±0.003	1.490±0.003	1.500±0.003	1.512±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% by mass	KLJ TM	-	0.20	0.10	0.1 (at 110°C for 2 Hrs.)	0.1 (at 110°C for 2 Hrs.)	0.1 (at 110°C for 2 Hrs.)	0.2 (at 110°C for 1 Hr.)	0.5 (at 110°C for 1 Hr.)
Moisture Content (Max.)	% by mass	ASTM E 203-08	-	0.10	0.15	0.10	0.10	0.10	0.20	0.20
Acidity as Acid (Max.)	% by mass	ASTM D 1045-08	0.08	0.2 (AV)	0.02	0.01	0.01	0.01	0.02	0.02
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	-	50	No Change	No Change (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	35 (at 150°C for 2 Hrs.)	35 (at 150°C for 2 Hrs.)
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	-	0.30 (Acid Value)	0.05	0.03 (at 150°C for 2 Hrs.)	0.03 (at 150°C for 2 Hrs.)	0.03 (at 150°C for 2 Hrs.)	0.05 (at 150°C for 2 Hrs.)	0.05 (at 150°C for 2 Hrs.)
Ester Value	mg KOH/gm	ASTM D 1045-08	-	269±3	350±6	385±8	404±3	402±3	503±3	575±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	98.0	99.5	99.0	99.5	99.5	99.5	99.5	99.5
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	98.0	99.5	99.0	99.5	99.5	99.5	99.5	99.5
Residual Alcohol (Max.)	% by area	KLJ TM	-	0.10	0.20	0.05	0.05	0.05	0.02	0.02
Viscosity at 20°C	cPs	KLJ TM	-	29-35	37-43 (at 25°C)	20-26	18-24	32-38	9-15	13-18
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	-	-	340	327	298	282
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-	-	-	-	-	-
REACH Compliance	Y/N	-	YES	NO	NO	NO	NO	NO	YES	YES

RoHS: All above products are complying to RoHS requirments.

REACH: A number of REACH registered/pre-registered products available.

Applications: Wire & Cables | Leather Cloth | Vinyle Flooring | Medical Equipment | Non-Toxic Food Packaging | Footwear | Flexible PVC Films | Adhesives | Perfumery | Automobile Parts | Rubber Belts | Flexible Pipes and Tubings | Paints | Lubricants & Metal Working Fluids | Furnitutre | Chemical Intermediates, etc.

The above properties are inductive and represent the values as tested in our laboratories. There is no guarantee/warranty whatsoever. Suitability of the product for particular application may be verified before use.

SPECIALITY

Trade Name / Properties	Unit	Test Method	KANATOL 3001 Tri Iso Decyl Tri Mellitate	KANATOL 3000 Tri Propyl Heptyl Tri Mellitate	KANATOL TM 8-10 (L) Tri Octyl Decyl Tri Mellitate (Linear)	KANATOL TM 8-10 Tri Octyl Decyl Tri Mellitate	KANATOL 3900 Tri Iso Nonyl Tri Mellitate	KANATOL 3800 Tri Octyl Tri Mellitate	KANATOL HT9	KANATOL 3400AC Acetyl Tri Butyl Citrate	KANATOL 3400C Tri Butyl Citrate	KANATOL 3450E	KANATOL 3200C Tri Ethyl Citrate
Appearance	NA	Visual	Water white clear liquid										
Colour (Max.)	Hazen	ASTM D 1045-08	50	40	100	100	50	50	40	40	50	30	40
Specific Gravity at 27°C	N/A	ASTM D 1045-08	0.963±0.003	0.965±0.003	0.977±0.003	0.977±0.003	0.978±0.003	0.989±0.003	0.969±0.003	1.051±0.003	1.042±0.003	0.995±0.003	1.137±0.003
Refractive Index at 27°C	N/A	ASTM D 1045-08	1.485±0.003	1.483±0.003	1.487±0.003	1.487±0.003	1.485±0.003	1.487±0.003	1.488±0.003	1.441±0.003	1.442±0.003	1.449±0.003	1.445±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% By Mass	KLJ TM	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.30	0.40	0.60	0.30 (at 110°C for 1 Hr.)
Moisture Content (Max.)	% By Mass	ASTM E 203-08	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.25	0.30	0.60	0.30
Acidity as Acid (Max.)	% By Mass	ASTM D 1045-08	0.03	0.03	0.02	0.02	0.03	0.03	0.15 (AV)	0.02	0.02	0.60 (AV)	0.02
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	No Change	65	No Change	No Change	65	65	No Change	No Change (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	55 (at 150°C for 2 Hrs.)
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	-	-	0.02	0.05	0.05	0.05	-	0.03	0.03	-	0.03 (at 150°C for 2 Hrs.)
Ester Value	mg KOH/gm	ASTM D 1045-08	270±3	269±3	277±3	277±3	287±3	306±3	271±3	559±3	468±3	389±3	591±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	99.0	99.5	99.0	99.0	99.0	99.0	99.5	99.0	99.0	99.0	99.0
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	99.0	99.5	99.0	99.0	99.0	99.0	99.5	99.0	99.0	99.0	99.0
Residual Alcohol (Max.)	% by area	KLJ TM	-	-	-	-	0.20	0.10	0.10	-	-	-	0.05
Viscosity at 20°C	cPs	KLJ TM	485-495	270-274	107-113	494-500	285-292	271-277	-	32-38	31-37	21-27	-
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	-	-	-	-	-	-	-	-	-
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-	-	300 at 4 mmHg	283 at 13.2 mmHg	-	173 at 5 mmHg	170 at 5 mmHg	-	-
REACH Compliance	%	KLJ TM	YES	YES	YES	NO	YES	N.A.	YES	YES	YES	YES	YES

Trade Name / Properties	Unit	Test Method	KANATOL 3200AC Acetyl Tri Ethyl Citrate	KANATOL 80S Octyl Stearate	KANATOL 40S n Butyl Stearate	KANATOL 8S Di Octyl Sebacate	KANATOL 1S Di Methyl Sebacate	KANATOL 4S Di n Butyl Sebacate	KANATOL DPGB 50	KANATOL DGB Di Ethylene Glycol Di Benzoate	KANATOL 9449 Ethylene Glycol Di Benzoate	KANATOL 9090 Di Iso Nonyl Terephthalate	KANATOL 8080 Bis 2 Ethyl Hexyl Terephthalate
Appearance	NA	Visual	Water white clear liquid									Water white clear liquid	
Colour (Max.)	Hazen	ASTM D 1045-08	50	60	60	40	60	50	100	100	50 (10% ACETONE)	20	20
Specific Gravity at 27°C	N/A	ASTM D 1045-08	1.137±0.003	0.858±0.003	0.857±0.003	0.913±0.003	0.993±0.003	0.934±0.003	1.146±0.003	1.168±0.003	-	0.970±0.003	0.983±0.003
Refractive Index at 27°C	N/A	ASTM D 1045-08	1.441±0.003	1.443±0.003	1.447±0.003	1.450±0.003	1.445±0.003	1.445±0.003	1520±0.003	1.520±0.003	-	1.486±0.003	1.487±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% By Mass	KLJ TM	0.30 (at 110°C for 1 Hr.)	0.20	0.20 (at 110°C for 2 Hrs.)	0.20	0.50 (at 110°C for 1 Hr.)	0.15 (at 110°C for 2 Hrs.)	0.15	0.15	-	0.10	0.10
Moisture Content (Max.)	% By Mass	ASTM E 203-08	0.30	0.10	0.10	0.10	0.25	0.10	0.15	0.15	1.00	0.10	0.10
Acidity as Acid (Max.)	% By Mass	ASTM D 1045-08	0.02	0.50	1.00 (AV)	0.02	0.50 (AV)	0.01	0.10	0.10	0.10	0.01	0.01
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	65 (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	No Change (at 150°C for 2 Hrs.)	No Change	75 (at 110°C for 1 Hrs.)	No Change (at 150°C for 2 Hrs.)	125	No Change	-	No Change	No Change
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	0.06 (at 150°C for 2 Hrs.)			0.03		0.03 (at 150°C for 2 Hrs.)	0.30	0.30	-	0.03	0.03
Ester Value	mg KOH/gm	ASTM D 1045-08	706±3	146±3	172±5	263±3	483±3	357±3	342±3	351±3	-	268±3	287±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	99.0	99.5	99.0	99.5	98.0	99.0	99.0	99.0	98.0	99.5	99.5
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	99.0	99.5	99.0	99.5	98.0	99.0	99.0	99.0	98.0	99.5	99.5
Residual Alcohol (Max.)	% by area	KLJ TM	0.02	-	-	0.10	0.10	0.10	0.10	0.10	-	0.10	0.10
Viscosity at 20°C	cPs	KLJ TM	47-53 (at 25°C)	16-22 (at 25°C)	8-14 (at 25°C)	58-64	6-7	-	97-103 (at 25°C)	85-91	-	80-86	60-66
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	294	-	343°C	-	287-289	-	-	-	365	-	400
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-	248 at 5 mmHg	-	-	231 at 1.5 mmHg	240 at 5 mmHg	-	-	-
REACH Compliance	%	KLJ TM	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

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The above properties are inductive and represent the values as tested in our laboratories. There is no guarantee/warranty whatsoever. Suitability of the product for particular application may be verified before use.

SPECIALITY

Trade Name / Properties	Unit	Test Method	KANATOL 4040 Di Butyl Terephthalate	KANATOL PA 33	KANATOL 1120	KANATOL 9061	KANATOL 9428
Appearance	NA	Visual	Water White Clear Liquid		Water White Clear Liquid		
Colour (Max.)	Hazen	ASTM D 1045-08	40	50	20	15	20
Specific Gravity at 27°C	N/A	ASTM D 1045-08	1.044±0.003	1.192±0.003	0.938±0.003	-	0.967±0.005 (at 20°C)
Refractive Index at 27°C	N/A	ASTM D 1045-08	1.502±0.003	1.446±0.003	1.414±0.003	-	1.444±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% By Mass	KLJ TM	0.10 (at 110°C for 2 Hrs.)	-	-	1.00 (at 110°C for 1 Hr.)	-
Moisture Content (Max.)	% By Mass	ASTM E 203-08	0.10	0.20	0.05	0.05	0.10
Acidity as Acid (Max.)	% By Mass	ASTM D 1045-08	0.01	6.00 (AV)	0.02	0.20 (AV)	0.10 (AV)
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	No Change (at 150°C for 2 Hrs.)	-	-	-	-
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	0.03 (at 150°C for 2 Hrs.)	-	-	-	-
Ester Value	mg KOH/gm	ASTM D 1045-08	404±3	-	-	-	271±8
Ester Content (Min.)	% by weight	ASTM D 1045-08	98.0	-	99.0	99.0	97.0
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	98.0	-	99.0	99.0	97.0
Residual Alcohol (Max.)	% by area	KLJ TM	0.10	-	-	-	-
Viscosity at 20°C	cPs	KLJ TM		3100-4100	-	-	-
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005		-	192	195-230	-
Boiling Point at Reduced Pressure	°C	IS 5298:2005		-	-	-	-
REACH Compliance	%	KLJ TM	YES	YES	YES	YES	YES

ADIPATE

Trade Name / Properties	Unit	Test Method	KANATOL 10A Di Iso Decyl Adipate	KANATOL 9A Di Iso Nonyl Adipate	KANATOL 8A Di Octyl Adipate	KANATOL 3A Di Iso Propyl Adipate	KANATOL 2A Di Ethyl Adipate	KANATOL 1A Di Methyl Adipate
Appearance	NA	Visual	Water White Clear Liquid					
Colour (Max.)	Hazen	ASTM D 1045-08	40	40	30	25	40	40
Specific Gravity at 27°C	N/A	ASTM D 1045-08	0.915±0.003	0.922±0.003	0.923±.003	0.960±0.003	1.005±0.003	1.062±0.003
Refractive Index at 27°C	N/A	ASTM D 1045-08	1.449±0.003	1.452±0.003	1.487±0.003	1.423±1.426	1.427±0.003	1.427±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% By Mass	KLJ TM	0.10	0.10	0.10	0.8 (at 110°C for 1 Hr.)	0.3 (at 110°C for 1 Hr.)	0.3 (at 110°C for 1 Hr.)
Moisture Content (Max.)	% By Mass	ASTM E 203-08	0.10	0.10	0.10	0.15	0.25	0.40
Acidity as Acid (Max.)	% By Mass	ASTM D 1045-08	0.03	0.03	0.02	1.00 (AV)	1.00 (AV)	0.05
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	50	50	40	40 (at 150°C for 2 Hrs.)	-	50 (at 150°C for 2 Hrs.)
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	0.05	0.05	0.04	-	-	-
Ester Value	mg KOH/gm	ASTM D 1045-08	263±3	281±3	303±3	487±3	555±3	640±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	99.0	99.5	99.5	99.5	99.0	99.0
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	99.0	99.5	99.5	99.5	99.0	99.0
Residual Alcohol (Max.)	% by area	KLJ TM	0.10	0.10	0.10	0.20	0.02	0.02
Viscosity at 20°C	cPs	KLJ TM	24-25	19-25	12-18 (at 25°C)	-	-	-
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	335	-	-	-
Boiling Point at Reduced Pressure	°C	IS 5298:2005	239 at 5 mmHg	233 at 5 mmHg	-	-	-	-
REACH Compliance	%	KLJ TM	YES	YES	YES	YES	YES	YES

RoHS: All above products are complying to RoHS requirments.

REACH: A number of REACH registered/pre-registered products available.

Applications: Wire & Cables | Leather Cloth | Vinyle Flooring | Medical Equipment | Non-Toxic Food Packaging | Footwear | Flexible PVC Films | Adhesives | Perfumery | Automobile Parts | Rubber Belts | Flexible Pipes and Tubings | Paints | Lubricants & Metal Working Fluids | Furnitutre | Chemical Intermediates, etc

MALEATES

Trade Name / Properties	Unit	Test Method	KANATOL 9M Di Iso Nonyl Maleate	KANATOL 8M Di Octyl Maleate	KANATOL 4M Di n Butyl Maleate	KANATOL 2M Di Ethyl Maleate	KANATOL 1M Di Methyl Maleate
Appearance	NA	Visual		Water White Clear Liquid			
Colour (Max.)	Hazen	ASTM D 1045-08	40	40	40	40	40
Specific Gravity at 27°C	N/A	ASTM D 1045-08	0.931±0.003	0.943±0.003	0.990±0.003	1.066±0.003	1.143±0.003
Refractive Index at 27°C	N/A	ASTM D 1045-08	1.457±0.003	1.446±0.003	1.446±0.003	1.438±0.003	1.442±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% by mass	KLJ TM	0.20	0.20	0.5 (at 110°C for 2 Hrs.)	1.00 (at 110°C for 1 Hr.)	1.00 (at 110°C for 1 Hr.)
Moisture Content (Max.)	% by mass	ASTM E 203-08	0.10	0.10	0.15	0.20	0.40
Acidity as Acid (Max.)	% by mass	ASTM D 1045-08	0.02	0.02	0.02	0.02	0.02
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	50	50	50 (at 150°C for 2 Hrs.)	50 (at 150°C for 2 Hrs.)	50 (at 150°C for 2 Hrs.)
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	0.04	0.04	0.05 (at 180°C for 2 Hrs)	-	-
Ester Value	mg KOH/gm	ASTM D 1045-08	304±3	330±3	493±3	652±3	779±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	99.0	99.0	99.0	99.0	99.0
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	99.0	99.0	99.0	99.0	99.0
Residual Alcohol (Max.)	% by area	KLJ TM	0.10	0.10	0.05	0.02	0.02
Viscosity at 20°C	cPs	KLJ TM	16-22	16-22	6-12	-	-
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	281	225	205
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-	-	-
Oxirane Value	%	KLJ TM			-	-	-
Iodine Value (Max.)	g I2/100 g	KLJ TM			-	-	-
REACH Compliance	%	KLJ TM	YES	YES	YES	YES	YES

BIO PLASTICIZERS

Trade Name / Properties	Unit	Test Method	KANAMOLL 650 ESBO	KANAMOLL 620 ESBO	KANATOL B 40 Bio Plasticizer
Appearance	NA	Visual	Pale Yellow Clear Liquid		Water White Clear Liquid
Colour (Max.)	Hazen	ASTM D 1045-08	150	150	40
Specific Gravity at 27°C	N/A	ASTM D 1045-08	0.996±0.006	0.990±0.006	0.925±0.015
Refractive Index at 27°C	N/A	ASTM D 1045-08	-	-	1.453±0.003
Volatile Loss at 130°C for 3 Hours (Max.)	% by mass	KLJ TM	-	-	0.30
Moisture Content (Max.)	% by mass	ASTM E 203-08	0.10	0.10	0.15
Acidity as Acid (Max.)	% by mass	ASTM D 1045-08	1.0±0.2	1.0±0.3	2.00
Heat Stability at 180°C for 2 Hours	Hazen	IS 9591:2013	-	-	100
Acidity After Heat Treatment at 180°C for 2 Hours (Max.)	% by mass	IS 9591:2013	-	-	-
Ester Value	mg KOH/gm	ASTM D 1045-08	-	-	187±3
Ester Content (Min.)	% by weight	ASTM D 1045-08	-	-	99.0
Plasticizing Ester By GLC (Min.)	% by area	KLJ TM	-	-	99.0
Residual Alcohol (Max.)	% by area	KLJ TM	-	-	-
Viscosity at 20°C	cPs	KLJ TM	-	-	15±3
Boiling Point at Atmospheric Pressure	°C	IS 5298:2005	-	-	-
Boiling Point at Reduced Pressure	°C	IS 5298:2005	-	-	-
Oxirane Value	%	KLJ TM	6.5±0.1	6.2±0.1	-
Iodine Value (Max.)	g I2/100 g	KLJ TM	3	5	-
REACH Compliance	%	KLJ TM	YES	YES	YES

RoHS: All above products are complying to RoHS requirments.

Applications: Flame Retardant plasticizers for PVC | Synthetic Rubber | Cellulose Ploymers | Photographic Film | Antifoaming Agent for Paper Coating Compounds | Water Based Adhesives Inks and Detergents | Stabilizing Agent for Urethane Foam | Anti Wear Agent in Lubricating Oil | Additives for improving Binding Properties | Corrosion Resistant in Paints | Gasoline Additive as Lead Scavenger | Hydraulic Fluid - improves Heat Stability | Extraction aid for Heavy Metals | Stabilizer for Aromatic Polyester | Solvent for Paints | Low Temperature Plasticizer, etc.

The above properties are inductive and represent the values as tested in our laboratories. There is no guarantee/warranty whatsoever. Suitability of the product for particular application may be verified before use.